



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,801	05/04/2005	Torsten Werner	1509-1049	6078

466 7590 12/19/2006
YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
----------	--------------

3643

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/533,801	Applicant(s) WERNER, TORSTEN	
	Examiner David J. Parsley	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5-4-05</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Amendment

1. This office action is in response to applicant's amendment dated 8-7-06 and this action is final.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it begins with an implied statement.

Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 16 recites the limitations "the opening" and "the wall" in lines 6-7. There is insufficient antecedent basis for these limitations in the claim.

Claim 17 recites the limitation "forward wall" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

5. Applicant is advised that should claim 19 be found allowable, claim 21 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

6. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. It is unclear to what the two portions are which the shoulder extends between as seen in lines 6-7 of the claim. Further, it is unclear to whether the cylindrical portion in line 2 and the

Art Unit: 3643

cylindrical portion in line 4 are the same or different structural components of the claimed invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 16, 19-20, 24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,771,451 to Woodring.

Referring to claim 14, Woodring discloses a shell case cartridge including a projectile – at 6, and having a cartridge blank seat – at the bottom of 12 proximate 16, receiving a replaceable propellant cartridge blank – at 18, the cartridge blank comprising a cylindrical container – at 18, having a primer – at 28, and a propellant charge – at 32, contained therein – see figure 2, the cartridge blank being insertable into the cartridge blank seat and operative upon ignition of the propellant charge for expulsion of the projectile – at 6, from the cartridge case – at 12 – see figure 2, the cartridge blank having inserted from its front end one of a number of exchangeable inserts having a diameter sealing against the cylinder wall of the cartridge blank – see at 16,18 in figure 2, a passage – at 22 or 26, through the insert providing a constriction to flow of combustion gases expelled from the cartridge blank upon ignition – see figure 2, the insert defining a high-pressure chamber – at 20 or 24, within the cartridge blank – see figure 2,

Art Unit: 3643

and separating the high-pressure chamber within the cartridge blank from an empty low-pressure chamber of substantially larger gas volume than the high pressure chamber and formed in the shell-case cartridge between the insert and the projectile – see at 14 in figure 2.

Referring to claim 16, Woodring further discloses the insert – at 18, has a cylindrical portion – at the lower portion of 18, insertable into the forward end of the cartridge – see at 12 in figure 2, the outer diameter of the portion sealing against the cartridge – see figure 2, and a cylindrical portion – at the upper portion of 18, protruding therefrom and dimensioned to be received in the opening – at 16, through the wall of the cartridge seat – at the bottom of 12 – see figure 2, a shoulder radially extended between the two portions – see connecting the different diameter portions of 18 in figure 2, and an axial passage going therethrough – see figure 2, the diameter of which is dimensioned for delaying the exiting combustion gases – see at 20,22,24 in figure 2.

Referring to claims 19, and 21, Woodring further discloses a membrane – at 34, is attached to an inner end of the insert sealing the passage – see at 34 in figure 2.

Referring to claims 20, 24 and 27, Woodring further discloses that the insert – at 18, is initially depressed into the cartridge – at 12, only to a depth that gives the cartridge an oversized axial length with respect to the cartridge seat – at the bottom of 12 – see figure 2.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3643

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodring as applied to claim 14 above, and further in view of U.S. Patent No. 3,675,576 to Whitney.

Referring to claim 15, Woodring does not disclose a dismountable rear portion of the shell-case cartridge is connectable to a front portion through a threaded connection, a rear portion of the cartridge blank having a reduced diameter receivable in a through hole in connected position. Whitney does disclose a dismountable rear portion – at 11, of the shell-case cartridge – at 10-12, is connectable to a front portion – at 12, through a threaded connection – see at 16,18 in figures 1-5, a rear portion of the cartridge blank – at 13, having a reduced diameter receivable in a through hole – at 15 in connected position – see figures 1-5. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Woodring and add the dismountable rear portion of the shell casing, so as to allow the casing to be easily opened to gain access to the components on the inside of the casing.

Claims 17-18, 22-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodring as applied to claim 14 above.

Referring to claim 17, Woodring does not disclose the insert is formed from a material of less hardness than the cartridge-seat to be deformable for sealing contact with the forward wall of the cartridge seat. However, it is deemed that the device of Woodring is capable of performing equally as well with the insert formed from a material of less hardness than the cartridge seat in that the insert – at 18 of Woodring is not integral with the casing – at 12 as seen in figure 2. Therefore it would have been obvious to one of ordinary skill in the art to take the device of

Art Unit: 3643

Woodring and add the insert being made of a material of less hardness than the cartridge seat, so as to allow for the device to be easily manufactured/assembled.

Referring to claim 18, Woodring does not disclose the insert is made of copper, copper alloy, aluminum or other light metal. However, it is deemed that the device of Woodring is capable of performing equally as well with the insert formed from copper, copper alloy, aluminum or other light metal. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Woodring and add the insert being made of copper, copper alloy, aluminum or light metal, so as to allow for the device to be easily manufactured/assembled.

Referring to claims 22-23, Woodring further discloses a membrane – at 34, is attached to an inner end of the insert sealing the passage – see at 34 in figure 2.

Referring to claims 25-26, Woodring further discloses that the insert – at 18, is initially depressed into the cartridge – at 12, only to a depth that gives the cartridge an oversized axial length with respect to the cartridge seat – at the bottom of 12 – see figure 2.

Response to Arguments

9. Regarding claims 14-27, applicant submits arguments with respect to the Dubai reference US 5834681 and as seen above in paragraphs 6-7 of this office action the Dubai reference is no longer used in the claim rejections in view of a new grounds of rejection. Therefore, applicant's arguments have been considered but are deemed moot in view of the new grounds of rejection set forth above in paragraphs 6-7.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to ammunition cartridges in general:

U.S. Pat. No. 4,892,038 to Lubbers – shows cartridge case device

U.S. Pat. No. 4,938,146 to Gunther et al. – shows cartridge case device

U.S. Pat. No. 5,936,189 to Lubbers – shows cartridge case device

U.S. Pub. No. 2003/0136293 to Torsten – shows cartridge case device

U.S. Pat. No. 7,004,074 to Van Stratum – shows cartridge case device

GB Pat. No. 2170301 – shows cartridge case device

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 3643

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David Parsley
Patent Examiner
Art Unit 3643